Journal of Attention Disorders Vol. 13(6):592-600 (2009)
ISSN: 1087-0547
doi: 10.1177/1087054709332158

Ethnicity as a Moderator of Treatment Effects on Parent-Child Interaction for Children With ADHD

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Objective:

To examine ethnic differences in observed parenting and child behavior and the moderating effects of ethnicity on the relationship between treatment and parent and child behavior.

Method:

Observations of 508 children with ADHD (ages 7–9) and their caregivers, collected during the Multimodal Treatment Study of ADHD, were analyzed using univariate and mixed-model ANOVAs.

Results:

Although baseline parenting practices differed by ethnic group, ethnicity did not moderate the relationship between treatment and either parenting or child behavior.

Conclusion:

Consistent with data from normative samples, parents of children with ADHD differed by ethnicity in their utilization of certain parenting strategies. However, different ethnic groups did not differ on benefit received from treatments for ADHD, measured by parent and child behavior. Although ethnicity did not emerge as a moderator, ethnic minority family engagement in treatment may be increased by recognizing different parenting strategies and modifying interventions accordingly. *(J. of Att. Dis. 2010; 13(6) 592-600)*

Commonly used parenting practices have been found to differ among parents of different ethnic groups (Baumrind, 1972; Bradley, Corwyn, Pipes McAdoo, & Garcia-Coll, 2001; Lamborn, Dornbusch, & Steinberg, 1996). For example, on average, African American parents are more likely than Caucasian parents to use physical discipline strategies and may display lower levels of warmth toward their children (Bradley et al., 2001). These strategies are consistent with an authoritarian parenting style (e.g., high levels of parental control, low levels of warmth; Baumrind, 1966). Although most researchers have long assumed that authoritative parenting (e.g., high levels of parental control, high levels of parental warmth, promotion of autonomy; Baumrind, 1966) is the most effective form of parenting in terms of promoting appropriate child behavior, research with African American families has challenged this view.

Indeed, several studies have demonstrated that African American parenting strategies consistent with authoritarian parenting are associated with children who obtain high grades, demonstrate social competence, and have low levels of psychopathology (Brody & Flor, 1998).

Also, physical discipline, which is thought to be an authoritarian parent behavior, may not

be related to high externalizing behavior ratings in African American children (Deater-Deckard, Dodge, Bates, & Pettit, 1996) but may be in Caucasian children (Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Also, the warmth of the parent–child interaction (PCI) may moderate the relationship between physical discipline and child externalizing behaviors in African American families (Deater-Deckard & Dodge, 1997).

Research on parenting practices in Latino families has been mixed. For instance, Mexican American parents have been rated as relatively permissive, nurturing, and egalitarian in some studies (e.g., Delgado, 1980; Vega, 1990) but as authoritarian or authoritative in others (e.g., Chilman, 1993; Martinez, 1988). Furthermore, warm and supportive parenting in Latino families has been linked to fewer child conduct problems (Florsheim, Tolan, & Gorman-Smith, 1996). Contrary to the research on African American and Latino parenting practices, research on Caucasian parent–child dyads seems to indicate that authoritative parenting may be the most successful form of parenting for Caucasian families in terms of its association with low levels of child behavior problems and high levels of child adjustment (Lamborn et al., 1991).

Much of the research examining linkages between parenting practices and child outcomes across ethnic groups has employed self-report of parenting practices. Self-report of parenting can be problematic when examining relations between parenting and child behavior, as both child behavior and parenting behavior share method variance (i.e., parent report), which can confound observed relationships between parenting and child behavior. A more objective measurement strategy is to observe parents and children during PCIs.

Studying ethnic differences in parenting styles using objective observation has been limited to the general population. Very little is known about ethnic differences in parenting practices in families with children with behavioral difficulties, such as those with ADHD. It is well documented that the presence of a child with ADHD has a significant impact on parenting and the parent–child relationship (for a review, see Johnston & Mash, 2001). Specifically, children with ADHD have been observed to be less compliant and more negative with their parents than children without ADHD as observed during structured interactions. In turn, parents of children with ADHD are less structured and less warm with their children than are parents of children without ADHD (Anderson, Hinshaw, & Simmel, 1994). Ethnic differences in these parenting behaviors have not been examined in parents of children with ADHD.

In intervention studies of children with ADHD, ineffective parenting practices are a major target of treatment (for a review, see Pelham, Wheeler, & Chronis, 1998). Therapists train parents to use more effective parenting strategies consistent with an authoritative parenting style, such as the increased use of labeled praise for compliance and nonphysical discipline strategies for noncompliance. It is possible that such training may be differentially effective across ethnicity because of observed baseline differences in parenting practices, philosophies, and effects of parenting practices on child behavior by ethnicity. For example, Bradley et al. (2001) showed that an authoritarian parenting style is related to low levels of child misbehavior among African American families. As a result, teaching African American families to be less authoritarian, and more authoritative, could possibly be a less effective strategy for this ethnic group. On the other hand, in a study of 634 low-income Head Start parents of different ethnic groups, Reid,

Webster-Stratton, and Beauchaine (2002) found that those parents who received parent training, regardless of ethnicity, were less critical and more positive with their children after parent training. Furthermore, children of parents receiving active intervention showed fewer behavior problems than did children of control parents. The authors were not able to conclude that the parent training was differentially effective across the various ethnicities.

The largest treatment outcome study of children with ADHD is the Multimodal Treatment Study of ADHD (MTA; MTA Cooperative Group, 1999a, 1999b). The MTA study compared medication management (MedMgt), intensive behavioral treatment (Beh), combined medication management and intensive behavioral treatment (Comb), and community care (CC) for a large and diverse sample of children with ADHD–combined type. Arnold and colleagues (2003) examined ethnicity as a moderator of treatment effects in the MTA study, focusing on reported child behavior as the primary treatment outcome. That report found that ethnic minority children as a group significantly benefited from the addition of Beh to MedMgt but Caucasian children did not. Although there were differences in outcome between African American and Caucasian children on teacher reports of ADHD and oppositional defiant disorder (ODD) symptoms, there were no differences on parent reports of these same symptoms. Latino children also showed benefit from the addition of the Beh on parent ratings of ODD symptoms. The significant interactions of treatment and ethnicity on outcome attenuated to non-significance when socioeconomic status (SES) variables were covaried, except for the general difference between Caucasians and pooled minorities. The authors concluded that factors related to both SES and ethnicity may influence treatment outcome for children with ADHD. However, only child behavior was examined in this study; ethnicity as a moderator of parenting outcomes in MTA treatments has not been examined. Examining the role of ethnicity on parenting behavior may help to explain the moderating role of ethnicity on treatment outcome for child behavior outcomes.

The goals of the current study are twofold. First, baseline ethnic differences in observed parenting practices and child behavior are described using the MTA sample of children with ADHD and their parents. Second, the moderating effects of ethnicity on the relations between MTA interventions and both observed parenting practices and child behavior are addressed. Both questions are examined using observational codings of parent and child behavior during analog laboratory settings.

Demographic characteristic	Caucasian (n = 348)	African American (n = 113)	Latino (n = 47)	χ^2 or F	p
Age (*M, SD*)	8.4, 0.9	8.3, 0.8	8.4, 0.9	1.5	.22
Maternal education (*M, SD*)	4.4, 1.1	4.0, 1.1	3.5, 0.9	15.0	.00
Male (%)	79.3	79.6	89.4	2.7	.26
Single parent (%)	19.0	52.2	36.2	49.7	.00
Public assistance (%)	7.2	36.3	48.9	85.1	.00
Baseline comorbid anxiety disorder (%)	31.0	34.5	44.7	4.7	.10
Baseline comorbid ODD or CD (%)	52.9	56.6	53.2	0.5	.78

Note: ODD = oppositional defiant disorder; CD = conduct disorder. For maternal education, a higher score indicates more education on the 6-level scale

Table 1. Demographic Characteristics of Entire Sample

Method

MTA Sample

A total of 579 children ages 7.0 to 9.9 with rigorously diagnosed *Diagnostic and Statistical Manual of Mental Disorders* ADHD–combined type (American Psychiatric Association, 1994) were recruited from multiple sources at six sites. Most (n = 567) of these children had observational data. Of the 567 who had observational data at baseline, there were 348 Caucasians, 113 African Americans, and 47 Latinos. As 59 other children were identified as belonging to "other ethnic groups," they are not included in the present article on ethnic differences. See Table 1 for demographic details (e.g., gender, age, comorbidity) within each ethnicity. The MTA study was approved by institutional review boards at each of the participating institutions; consent was obtained for all participants.

Independent Variable: MTA Design and Treatment Groups

The MTA design has been described in detail elsewhere (MTA Cooperative, 1999a). Briefly, children were randomly assigned to one of four treatment arms for 14 months of intervention: MedMgt, Beh, Comb, or CC. All interventions were delivered at each of the six MTA sites. MedMgt began with a 4-week, double-blind, placebo-controlled titration period followed by monthly MedMgt (see Greenhill, Abikoff, Arnold, & Cantwell, 1996). Beh included group and individual parent training, a child-focused 8-week summer treatment program, 12 weeks of a half-time paraprofessional aide in the classroom, and school-based teacher consultation. Of note, the parent training program focused on teaching parents the use of an authoritative parenting style (e.g., praise, direct commands, strategic punishment). The Comb group received both MedMgt and Beh interventions. Participants in the CC group received no active MTA treatments, but families were provided a report of their initial assessments, along with a list of community mental health services and resources. Analyses reported in this study were performed on data obtained at the pretreatment baseline and 14-month posttreatment assessments.

Observational Codings

The laboratory task. Laboratory observations of PCIs were included in the MTA to objectively assess parent–child relationships. Details of the procedures can be found in Wells et al. (2006). Three separate segments of PCI were coded, including (a) the child's sitting quietly while the caregiver was working (Parent Busy), (b) a schoolwork assignment (School Work), and (c) playroom cleanup (Clean-Up).

Codes and rater training. Six trained research assistants from three MTA sites—who were blind to the diagnostic status of the participants, treatment assignment, and hypotheses of the study—rated the parent and child PCI behaviors (Wells et al., 2006). The research assistants used a 6-point Likert-type metric (1 = *very poor*, 6 = *excellent*) to measure the quality of both parental (five codes) and child (three codes) behaviors during the PCI segments. These relatively global codes were based on past literature regarding the parental and child behaviors pertinent to ADHD.

The five parental behaviors included *setting stage* (parent prepares the child for upcoming events by giving a synopsis of what is going to happen and his or her expectations of the child), *behavior management* (parent set limits when child negative behavior is high and "backs off" when child is behaving appropriately), *annoyance* (level of verbal and nonverbal anger and annoyance expressed by the parent toward the child), *positive reinforcement* (rate of verbal and nonverbal positive reinforcement and praise expressed by the parent toward the child), and *warmth* (level of positive emotional expression toward the child by the parent). The child behaviors included *complaining or whining* (how often the child showed dissatisfaction and/or displeasure

with the task, with the PCI, or any other aspects of the situation), *verbal abuse* (how often the child directed a negative verbal or nonverbal communication toward the parent such as a derogatory name), and *compliance* (how often the child followed the parent's directions). For each behavior across the three parts of the observational measure, intraclass correlation coefficients were adequate (.54 to .79 for parent behaviors, .62 to .85 for child behaviors; Wells et al., 2006).

Measures for Socioeconomic and Other Potential Confounders

Mother's education level, receipt of public assistance, and single-parent status were selected as measures of potential SES confounders, based on conceptual considerations and previous findings of effect on treatment outcome in this sample (MTA Cooperative Group, 1999a; Rieppi et al., 2002). Mother's education was coded on six levels from less than seventh grade to graduate professional; receipt of public assistance was a dichotomous variable based on anyone in the family receiving public assistance; and single-parent status was dichotomous, defined as other than living with two parent figures (natural, step, or common law). Comorbidity was determined by a baseline Diagnostic Interview Schedule for Children–Parent Version (Shaffer, Fisher, Dulcan, & Davies, 1996).

Overall Analytic Strategy

To compare baseline differences in parenting practices and child behavior across ethnic groups, the entire sample of Caucasian (n = 348), African American (n = 113), and Latinos (n = 47) was used for analyses. Other ethnic groups had too few participants to make meaningful comparisons.

The analysis for ethnic differences in treatment outcomes is complicated for the following reason: Although no site × treatment interactions were found for the primary MTA outcomes, there was a clear main effect of site on many treatment outcomes (MTA Cooperative Group, 1999b), presumably because of site demographics and possibly subtle differences in selection, management, treatment, and evaluation during the MTA study. Because the ethnic distribution varied across sites, it would not be a fair comparison to use all participants from each ethnic group to compare treatment efficacy. Each participant must be compared only against other participants at the same site in the same treatment group. To help resolve such problems, we adopted the strategy used by Arnold et al. (2003) in their examination of ethnic effects in the MTA sample. They used a matched-pair strategy, controlling for site, treatment group, and sex. Of the 115 African American participants, it was

	Caucasian (n = 348)		African American (n = 113)		Latino (n = 47)		Ethnicity Main Effect F	Significant Post Hoc Effects
Outcome Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*		
Parent								
Setting stage	3.35	0.61	3.10	0.63	3.03	0.50	11.25**	C > A, L
Behavior management	4.71	0.04	4.86	0.06	4.43	0.82	5.89*	A > L
Positive reinforcement	1.89	0.68	1.49	0.53	1.42	0.38	24.97**	C > A, L
Warmth	3.55	0.50	3.23	0.50	3.23	0.40	24.16**	C > A, L
Annoyance	1.34	0.47	1.51	0.70	1.34	0.34	4.58	—
Child behaviors								
Complaining or whining	2.31	0.88	1.80	0.69	2.20	0.92	15.41**	C, L > A
Verbal abuse	1.30	0.50	1.10	0.26	1.28	0.29	9.73**	C > A

Compliance	5.19	0.84	5.63	0.54	5.14	0.91	14.38**	A > C, L

Note: C = Caucasian, A = African American, L = Latino. The range for all codings was 0 to 6. For behavior management, parents of Caucasian children did not differ from any of other parents. For verbal abuse, Latino children did not differ from any of the other children.
*$p < .01$. **$p < .001$.

Table 2. Baseline Means and Standard Deviations and Ethnic Differences on Parent and Child Observational Codings

thus possible to match 92. In all, 8 girls and 15 boys could not be matched because of insufficient Caucasians of the same sex and treatment group at their site. For our analyses, one African American–Caucasian pair had to be dropped because of missing baseline observational data, resulting in a total of 91 matches for the current analyses. Latino participants were similarly matched with Caucasians, resulting in 37 matches out of 49 Latino participants, with 1 girl and 11 boys unable to find Caucasian matches.

To examine the baseline differences on the observational task, we conducted univariate ANOVAs using ethnicity as the independent variable and the overall observation coding (averaged across the three settings) as the dependent variable. To examine the moderating effects of ethnicity on treatment outcomes, mixed-model ANOVAs were conducted utilizing ethnicity and treatment as between-subjects variables and time as a within-subjects variable. For these calculations, we were interested in a significant interaction effect for the ethnicity × treatment × time term. For these analyses, an intent-to-treat analysis with the last observation carried forward for any missing data was used. For all statistically significant effects, Cohen's *d* was calculated to help interpret the clinical significance of the findings.

Consistent with those methods employed by Arnold et al. (2003), maternal education, single parenthood, public assistance or welfare status, baseline comorbid anxiety disorder, baseline comorbid ODD or conduct disorder (CD), severity of ADHD symptoms, and severity of ODD symptoms were all examined as potential confounders. First, all ethnic comparisons were performed on the dependent variables without the confounders. For any significant differences found, ethnic groups were compared on each confounder to identify significant group differences. Finally, for any ethnic comparisons that significantly differed on a confounder, the main analyses were repeated including that confounder as a covariate.

Results

Baseline Differences

Observational codings. Baseline differences were examined using univariate ANOVA analyses. Table 2 displays a summary of these results. Significant effects for ethnicity were demonstrated for all parent and child behaviors, except parental annoyance.

To further investigate this effect, Tukey's post hoc tests comparing the different ethnicities were conducted. Parents of Caucasian children had higher ratings on setting stage than did parents of African American ($p < .001$, $d = .40$) and Latino children ($p < .01$, $d = .57$). Parents of Caucasian children also were observed to use higher levels of positive reinforcement than were parents of African American ($p < .001$, $d = .66$) and Latino children ($p < .001$, $d = .85$). In addition, they were rated as using more warmth than were parents of African American ($p < .001$, $d = .64$) and Latino children ($p < .001$, $d = .71$). Parents of African American children displayed higher levels of behavior management than did parents of Latino children ($p < .01$, $d = .74$) but were not significantly different from parents of Caucasian children on this measure. Parents of Caucasian

	Three-Way Interaction	
Outcome Measure	C-A *F*	C-L *F*
Parent behaviors		
Setting stage	1.44	0.18
Behavior management	2.75	2.65
Positive reinforcement	0.65	0.74
Warmth	0.89	0.87
Annoyance	2.52	1.89
Child Behaviors		
Complaining or whining	1.96	0.35
Verbal abuse	1.43	1.55
Compliance	1.11	1.45

Note: C-A = Caucasian–African American matched pairs; C-L = Caucasian–Latino matched pairs. No interactions were significant (all *p* values > .05).

Table 3. Three-Way Interaction (Ethnicity × Time × Treatment) Results Examining Ethnicity as a Moderator of Treatment Outcome

and Latino children did not differ in their use of behavior management skills. Parents of African American children were not significantly different from parents of Latino children on setting stage, positive reinforcement, or warmth.

Using child behaviors as the dependent variables, significant effects were again detected for ethnicity. Tukey's post hoc analyses showed that Caucasian and Latino children evidenced more complaining or whining ($p < .001$, $d = .64$ and $p < .001$, $d = .49$, respectively) and less compliance ($p < .001$, $d = .62$ and $p < .001$, $d = .65$, respectively) than did African American children. African American children demonstrated less verbal abuse than did Caucasian children ($p < .001$, $d = .50$) but did not significantly differ from Latino children. Caucasian and Latino children did not significantly differ on any outcome variables.

Confounder analyses. To identify confounders, chi-square goodness-of-fit tests and ANOVAs were conducted to examine ethnic group differences. Significant ethnic group differences emerged for maternal education, $\chi^2(10) = 43.74$, $p < .001$, single parenthood, $\chi^2(2) = 50.14$, $p < .001$, public assistance, $\chi^2(2) = 91.60$, $p < .001$, and comorbid anxiety disorder, $\chi^2(2) = 6.43$, $p < .05$ (see Table 1). Ethnic groups did not differ on severity of ADHD symptoms, ODD symptoms, or comorbid ODD or CD. When the main analyses were repeated with those confounding variables that differed across ethnicity included as covariates, the reported pattern of results remained the same: All significant ethnicity effects remained significant after entering potential confounding variables.

Treatment Differences

Analyses of MTA treatment outcomes using the post-treatment objective PCI data showed improved parenting behaviors for the groups receiving the psychosocial treatments (Beh and Comb; Wells et al., 2006). In the current study, we examined whether ethnicity may have been a moderating variable for any effect of treatment on parent or child behavior through 2 (ethnicity) × 4 (treatment) × 2 (time) ANOVA analyses. There were no significant interaction effects of ethnicity × treatment × time on any parent behaviors or child behaviors for either the African American–

Caucasian or Latino– Caucasian matched pairs (Table 3). To assess whether the lack of significant effects was because of the complexity of the interaction effect being modeled, we conducted an additional set of analyses using change scores and dropping time from the analyses. This paralleled the analyses conducted by Arnold et al. (2003), in which significant effects of ethnicity were demonstrated. There continued to be no significant interaction between ethnicity and treatment for any of the outcomes.

Discussion and Conclusion

Using coded interactions between children with ADHD and their parents, ethnic differences in observed parenting and child behavior were examined. Differences were found between the different ethnic groups on most baseline measures of observed parent and child behavior. However, ethnicity did not moderate treatment effects.

Several significant baseline ethnic differences between parent–child dyads were found. Parents of Caucasian children in the MTA, on average, demonstrated higher levels of setting stage, positive reinforcement, and warmth than did parents of children of other ethnicities. All of these behaviors are consistent with parenting strategies comparable to the authoritative parenting dimension (Baumrind, 1966), such as providing warmth and positive reinforcement in addition to high levels of parental control and structure. Parents of African American children in the MTA, on average, were observed to use higher levels of behavior management than were parents of children of other ethnicities. The finding that parents of African American children are less warm than parents of Caucasian children also was replicated. This may be consistent with the reliance on more authoritarian strategies in African American families (Baumrind, 1972; Brody & Flor, 1998; Lamborn et al., 1996). Although the literature on parenting in Latino families has been mixed, the current results indicate that parents of Latino children may parent similarly to parents of African American children, at least in an analog situation as used in this study.

Despite higher levels of parental warmth, positive reinforcement, and setting stage, Caucasian children with ADHD demonstrated significantly more negative behaviors than did African American children with ADHD, even though comparable rates of ODD or CD diagnoses were documented across these ethnic groups. This finding was unexpected given that children from this same sample of African American children exhibited more misbehavior than did Caucasian children on observational codings collected in the school setting (Epstein et al., 2005). However, Epstein and colleagues (2005) also found that significant ethnic differences disappeared when the analyses controlled for the behavior of a matched-ethnicity child in the classroom without ADHD. Thus, without codings of teacher behavior in these classrooms, we can only speculate that contextual factors promote greater rates of misbehavior among African American children in the classroom setting and less in the laboratory setting. It is possible that the analog setting itself, defined by either its novelty or its structure, may have had a beneficial effect on the behavior of African American children or a detrimental effect on the Caucasian and Latino children. Alternatively, it could be that school settings have a detrimental effect on the behavior of African American children or a beneficial effect on Caucasian children. Another explanation for the present set of findings is that the mere presence of parents has more of a positive behavioral influence on African American children than for other ethnic groupings. Future studies should empirically test these hypotheses.

Given the findings from (a) Arnold et al. (2003), indicating that Comb was more effective for ethnic minority children than for Caucasian children in reducing reported ADHD symptoms, and (b) Wells et al. (2006), showing treatment-related changes on observed PCIs, we examined whether there were any moderating effects of ethnicity on treatment as measured by observational

codings. No such effects were found for observed parent or child behaviors. In other words, children and parents of different ethnicities did not differentially benefit from one treatment over another on the observed measures. Back to the explanation offered above, it may be that contextual variables inherent to the analog PCI setting produced an effect on parenting behaviors that exceeded any intervention effects.

The study has several limitations. First, it is difficult to draw conclusions about Latino parenting and child behavior because of the small number of Latino participants examined. Second, ethnicities of parents, therapists, and observers were not obtained during the course of the study, thereby preventing an examination of the effects of the ethnicities of parents, therapists, and/or observers on the observed findings. Indeed, there are data to suggest that the ethnic status of observers can affect observational ratings (Gonzales, Cauce, & Mason, 1996).

Third, another important limitation lies in the sample of families considered. The MTA was an intensive clinical trial. As such, the data analyzed herein reflect only those families agreeing to participate in such a trial. As ethnic differences exist in treatment acceptability (e.g., Krain, Kendall, & Power, 2005) and more broadly in research participation, the sample included in this study is a select group of families, and results may not be representative of families in the community with children who have ADHD. Fourth, critics could argue that the controlled and observational nature of the analog design of the PCIs is not comparable to real-life parenting. These interactions were designed to be as ecologically valid as possible, with parents interacting with a child during times when the parent was busy, while the child completed homework, and during cleanup periods. However, these PCIs took place in a laboratory setting in which the parent and child knew that they were videotaped, and their interactions were periodically interrupted by research assistants giving instructions. These methodological limitations may have influenced child and parent behavior, possibly restricting the application of these findings. Fifth, observational coders are typically blind to variables that may influence their behavior ratings, such as treatment status or child diagnosis. However, it is not possible for coders to remain completely blind to ethnicity, as people make judgments about ethnicity based on appearance and behavior. Unfortunately, this limitation was unavoidable for the current study. Sixth, the observational codings used in the present study reflect ratings of the overall quality of parent and child behavior rather than actual behaviors or sequences of behaviors. Without these more molecular codings, the temporal relationships between child and parent behaviors cannot be examined. Hence, it is impossible to derive any conclusions as to the causal or temporal relationships between parent behavior and child behavior.

The clinical implications of baseline parenting differences are important to consider in light of the lack of any moderating effect of ethnicity on treatment outcomes. The ethnic diversity of the MTA sample represents a strength of the current study and helps to answer a very important question: Should clinical researchers concentrate on creating different treatments for different ethnicities? Results from this study do not support that conclusion. However, it may be fruitful to consider how we can deliver the empirically supported treatments for ADHD, particularly those that focus on teaching parenting strategies (e.g., behavioral parent training) in a culturally responsible way. Behavioral parent training programs for children with ADHD focus on improving parent–child relationships through an increase in the use of positive parenting strategies. Researchers may need to consider how to build on successful authoritarian parenting in African American families in a way to make it more effective as well as warmer and more supportive (i.e., Can a velvet glove be fitted to the iron fist?). As ethnic minority parents are more likely to drop out of treatment (Kazdin, Holland, & Crowley, 1997), future research on such subtle but formal

adaptations of typical parent training have been suggested by some (e.g., Forehand & Kotchick, 1996) to examine whether these changes are more amenable to ethnic minority families and subsequently result in better outcomes.

Acknowledgements

The Multimodal Treatment Study of Children with ADHD was a National Institute of Mental Health (NIMH) cooperative agreement randomized clinical trial involving six clinical sites. Collaborators from NIMH include the following: Peter S. Jensen, MD (currently at Columbia University); L. Eugene Arnold, MD, MEd (currently at Ohio State University); Joanne B. Severe, MS (Clinical Trials Operations and Biostatistics Unit, Division of Services and Intervention Research); Benedetto Vitiello, MD (Child & Adolescent Treatment and Preventive Interventions Research Branch); John Richters, PhD (currently at National Institute of Nursing Research); and Donald Vereen, MD (currently at National Institute on Drug Abuse). Principal investigators and coinvestigators from the six sites were the following: From the University of California, Berkeley or the University of California, San Francisco were Stephen P. Hinshaw, PhD (Berkeley); Glen R. Elliott, PhD, MD (San Francisco). From Duke University were C. Keith Conners, PhD; Karen C. Wells, PhD; John March, MD, MPH. From the University of California, Irvine or the University of California, Los Angeles were James Swanson, PhD (Irvine); Dennis P. Cantwell, MD (deceased, Los Angeles); Timothy Wigal, PhD (Irvine). From Long Island Jewish Medical Center or Montreal Children's Hospital were Howard B. Abikoff, PhD (currently at New York University School of Medicine); Lily Hechtman, MD (McGill University). From New York State Psychiatric Institute, Columbia University, or Mount Sinai Medical Center were Laurence L. Greenhill, MD (Columbia); Jeffrey H. Newcorn, MD (Mount Sinai School of Medicine). From the University of Pittsburgh were William E. Pelham, PhD (currently at State University of New York, Buffalo); Betsy Hoza, PhD (currently at University of Vermont). The statistical and design consultant was Helena C. Kraemer, PhD (Stanford University).

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